

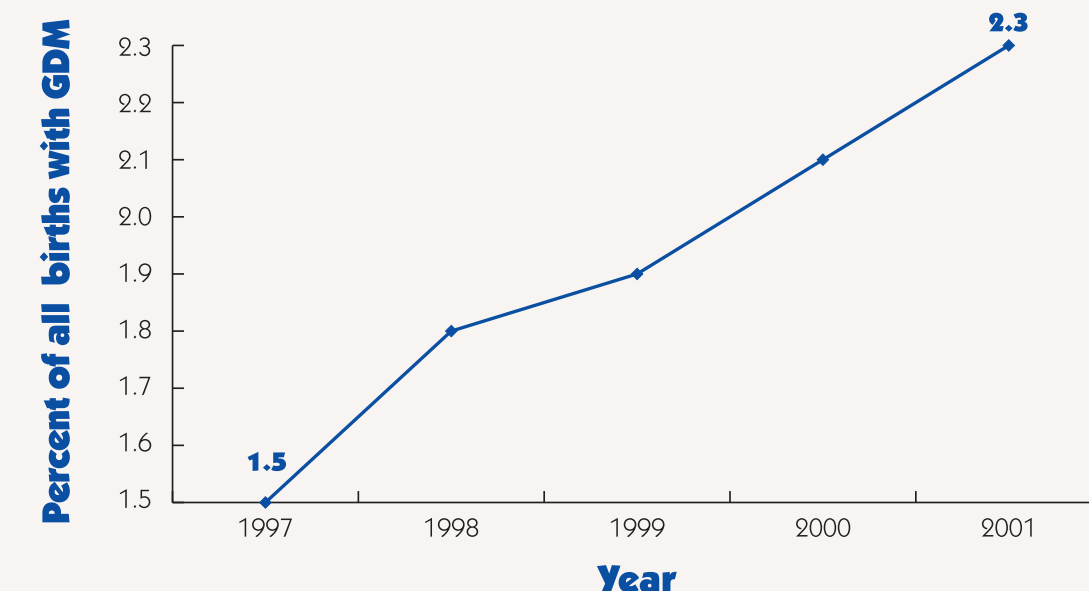
# The Influence of Selected Risk Factors on Gestational Diabetes Across Ethnic/Racial Subgroups in Utah



## Introduction

- Nationally, gestational diabetes affects about 4 percent of all pregnancies
- Gestational diabetes in Utah is lower than the U.S., but has increased consistently in the past five years to the current rate of 2.3% (Figure 1)
- Risks for infants born to mothers with gestational diabetes include:
  - Increased risk of shoulder dystocia
  - Increased risk of macrosomia
  - Increased risk of birth injuries
  - Increased risk of hypoglycemia
- Risks for mothers with gestational diabetes include:
  - Increased risk of developing type 2 diabetes
  - Increased risk of permanent change in lipid metabolism after pregnancy

Figure 1. Trends in Gestational Diabetes among Utah Mothers 1997-2001



## Methods

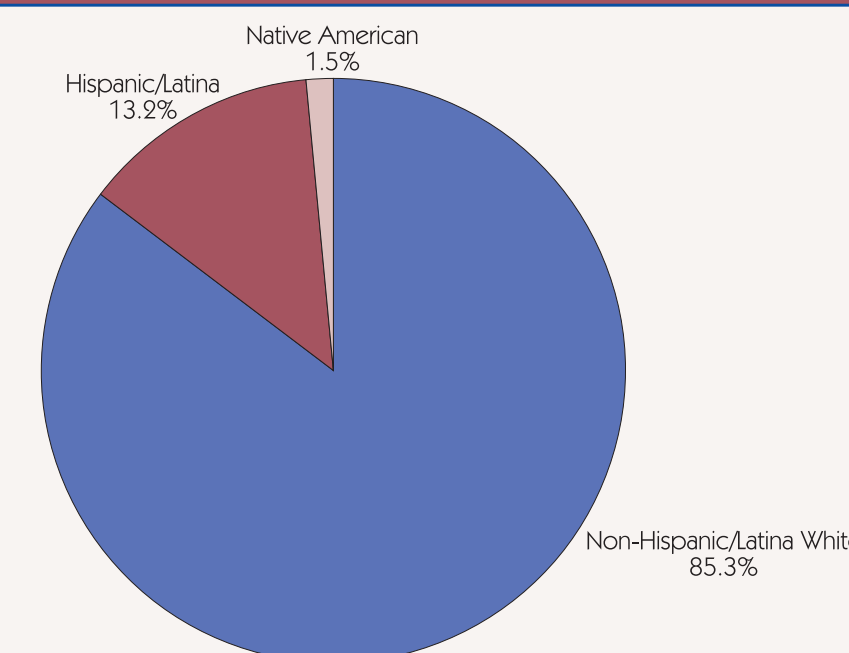
### Research Questions

- Are there differences in gestational diabetes across racial/ethnic groups that persist with known risk factors controlled?
- Do these risk factors operate differently across racial/ethnic groups?

### Methodology

- Data are from Utah Office of Vital Records and Statistics
- Study was limited to singleton births for non-Hispanic/Latina white, Hispanic/Latina and Native American mothers (Figure 2)
- Births to mothers with pre-existing diabetes were excluded from the analysis
- Logistic regression was used to assess the risk of gestational diabetes
- Controls included age, pre-pregnancy weight status, number of prior live births, and number of prior still births
- Analyses were run for the entire population; race and ethnicity were included in the model
- Analyses were also run for each ethnic/racial subgroup

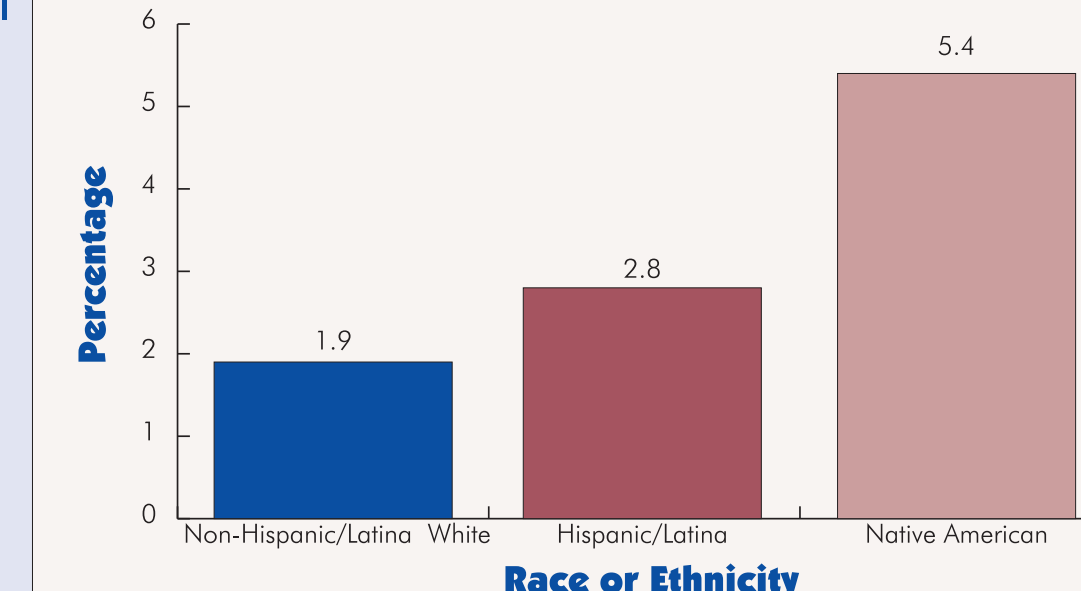
Figure 2. Percentage Distribution for Selected Populations of Utah Mothers Who Gave Birth 1999-2001



## Findings

- Less than 2% (1.9%) of non-Hispanic/Latina white mothers had gestational diabetes, compared to 2.8% of Hispanic/Latina mothers, and 5.4% of Native American mothers (Figure 3)
- For each racial or ethnic group, with all known risk factors controlled:
  - Age and obesity increased the risk of gestational diabetes for all groups
  - Number of prior live births and prior stillbirths did not increase the risk of gestational diabetes for any group
- Unlike obesity, being moderately overweight does not appear to be a significant risk factor for Native American mothers
- Hispanic/Latina mothers were 1.5 times more likely to have gestational diabetes than non-Hispanic/Latina white mothers (with controls)**
- Native American mothers were 2.2 times more likely to have gestational diabetes than non-Hispanic/Latina white mothers (with controls)**

Figure 3. Prevalence of Gestational Diabetes for Utah Mothers by Race/Ethnicity, 1999-2001



## Implications

- The higher prevalence of gestational diabetes seen in Hispanic/Latina and Native American mothers persists even with known risk factors controlled
- This finding suggests that other unmeasured factors influence the development of gestational diabetes
- We may need to pay closer attention to the future risk of heart disease and type 2 diabetes for women who have had gestational diabetes
- We may need to make special efforts to make sure our Hispanic/Latina and Native American mothers do not fall out of the medical loop after delivery

### References

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